WARRANTY

M.B.P., will any repairs necessary during the first 12 months after purchase of a new unit, with the exceptions shown under 1 and 2 below, and under the conditions shown in item 3.

1.- Damage caused by external abuse, customer negligence, or failure to operate the unit in accordance with the instructions supplied with the unit.

2.- Normal maintenance items.

3.- Within the first 12 months after purchase, M.B.P. will pay 100% of the cost of covered repairs.

In no case will M.B.P.liability extend beyond repair or repalacement of the equipment. Such liability is limited to the amount of the original purchase price paid for the unit, minus a reasonable deduction for the time the unit has been in service. It is the responsibility of the purchaser under this warranty to ship or deliver the failed paint sprayer to the authorized service center at the purchaser's expence. Parts or components covered under this warranty may either be repaired or replaced at M.B.P. option.

Equipent not covered by M.B.P. warranty. Accessories or components of equipment sold by M.B.P. that are nort manufactured by M.B.P. are subject to the warranty, if any, of their manufacturer. M.B.P. will provide purchaser with reasonable assistance in making such claims.

The Industry Department of The Basque Goverment, states that all electric and pneumatic airless equipment manufacture by M.B.P. S.L., follows the ''CE'' standards under the number 83/392/CEE.

CE

CE Ex 94/9/EC ATEX MBP

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IMP 036-MARZO 2015

MBP®
SPRAY EQUIPMENT

ELECTRIC PAINTING PUMP KS 2300

I.MANUAL

DECLARACION DE CONFORMIDAD ‘’CE”
‘’EC” DECLARATION OF CONFORMITY

MODELO / MODEL KS 2300

Este producto cumple con la siguiente directiva de la Comunidad Europea.

This Product complies with the following European Comunity Directive.

Directiva 2006/42/CEE y 94/9/CEE Atex sobre máquinas.
Machinery Directive 2006/42/EC and 94/9/EC Atex Directive.

APROBADO POR /
APPROVED BY AITOR ORTIZ

FECHA / DATE

MBP, S.L. figura inscrita en el Registro Industrial del País Vasco con el Nº 01/8030 y cumple los requisitos para el desarrollo de su actividad comercial.
MBP, S.L. is registered in the Industrial Register of the Basque Country with the Nº 01/8030.

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PUMP COMPONENTS

ACCESORIES

SIEVE

REF. GR.70.70-70 MESH
REF. GR.71.20-120 MESH

PACKOIL

REF: B.100.20

AIRLESS GUN FILTER

REF.	MESH	COLOUR
J.260.01	50	WHITE
J.260.02	100	YELLOU
J.260.03	200	RED

TIP EXTENSIONS 90cms. 30cms.

HP FILTER

SCREEN

REF: G.100.20-60 MESH

REF: G.100.05-100 MESH

REF: G.100.21-200 MESH

SHUTDOWN AND CARE

* Check the packing nut daily. First follow the Pressure Relief Procedure. Be sure the packing nut is 1/3 full of Oilpack at all times to help prevent fluid buildup on the piston rod and premature wear of packings.

* Clean the fluid filter often and wherenever the sprayer is stored. First follow the Pressure relief procedure.

* Flush the sprayer at the end of each work day and fill it with mineral spirits to help prevent pump corrosion and freezing.

STANDARD SPRAY TIPS

ORIFICE SIZE MM/INCHES	FLOW IN LITRES/MIN	FAN WIDTH AT 300 MM.	ORIFICE SIZE MM/INCHES	FLOW IN LITRES/MIN	FAN WIDTH AT 300 MM.
0.23 MM. .009" 9.20 9.40 9.60	0.30	100-150 200-250 300-350	0.53 MM. .021" 21.20 21.40 21.60	1.74	100-150 200-250 300-350
0.28 MM. .011" 11.20 11.40 11.60	0.45	100-150 200-250 300-350	0.58 MM. .023" 23.20 23.40 23.60	2.08	100-150 200-250 300-350
0.33 MM. .013" 13.20 13.40 13.60	0.64	100-150 200-250 300-350	0.63 MM. .025" 25.20 25.40 25.60	2.49	100-150 200-250 300-350
0.38 MM. .015" 15.20 15.40 15.60	0.87	100-150 200-250 300-350	0.68MM. .027" 27.20 27.40 27.60	2.91	100-150 200-250 300-350
0.43 MM. .017" 17.20 17.40 17.60	1.13	100-150 200-250 300-350	0.74 MM. .029" 29.20 29.40 29.60	3.33	100-150 200-250 300-350
0.48 MM. .019" 19.20 19.40 19.60	1.36	100-150 200-250 300-350	0.79 MM. .031" 31.20 31.40 31.60	3.86	100-150 200-250 300-350

PUMP COMPONENTS

1.- Pressure regulator.
Ref: 100.610.00

2.- On / Off switch.
Ref: CEA.026

3.- Pressure drain valve.
Ref: 100.420.00

4.- Suction pipe.
Ref: 102.300.00

5.- Displacement pump.
Ref: 102.200.00

6.- Check that the product doesn't leak.
Put a drop of oil.

7.- Trasmitting pressure.
Ref: 100.410.00

8.- Pressure control assy.
Ref: 102.600.00

9.- Strainer.
Ref: D.910.00

10.- Paint outlet.
Ref: G.100.06

11.- Wire.
Ref: 102.630.00

12.- Troley.
Ref: 102.500.00

13.- Gun.
Ref: J.600.00

SAFETY WARNINGS

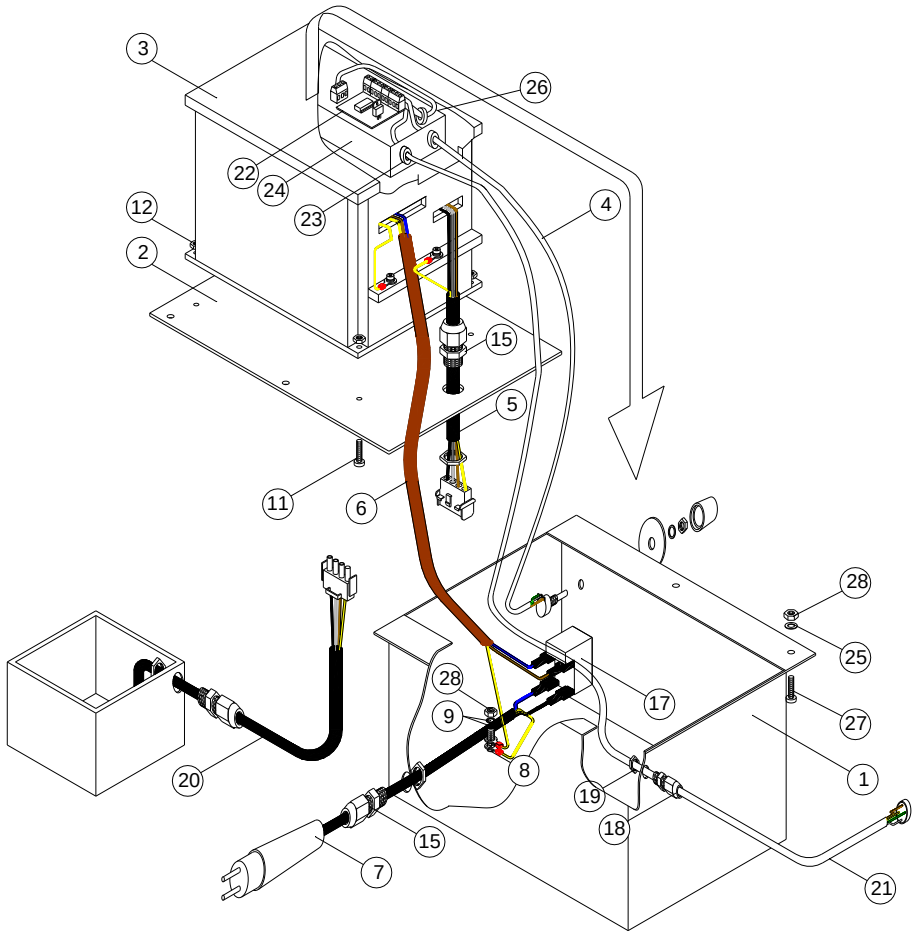
ATTENTION

This equipment generates very high fluid pressure. High pressure spray can cause serious injury. Read and understand all instructions before operating.
Never point the spray gun at anyone or at any part of the body.
Never put hand, fingers over the spray tip.
Always have the tip guard in place on the spray gun while spraying.
High pressure fluid in the hoses can be very dangerous. If the hose develops a leak, split or rupture due to any kind of wear, damage or misuse, the high pressure spray emitted from it can cause a fluid injection injury or other serious bodily injury or properly damage.
Never use a damaged hose
Tighten all fluid connections securely before each use. High pressure fluid can dislodge a loose coupling or allow high pressure spray to be emitted from the coupling.
Proper hose grounding continuity is essential to maintaining a grounded spray system.
If any fluid appears to penetrate your skin, get emergency medical care at once. Do not treat as a simple cut. Tell the doctor exactly what fluid was injected.
All chemicals used in the pump must be compatible with the wetted parts of the pump.

PRESSURE HAZARD

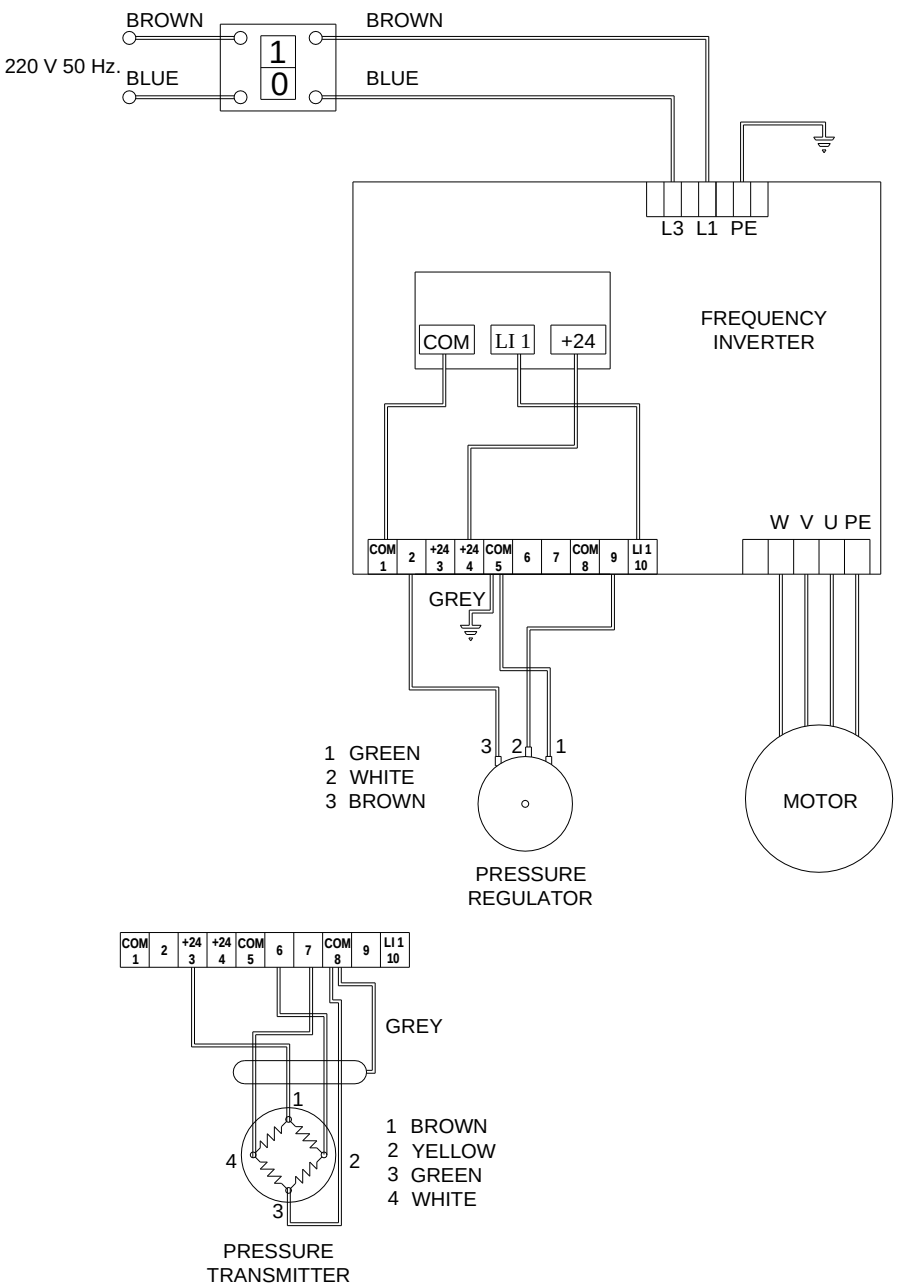
This pump can develope 240 bar working pressure. Be sure that all spray equipment and accesories used are rated to withstand this pressure. Do not exceed the maximum working pressure of any component or accessory used in the system.

PRESSURE CONTROL ASSY



Nº	REF.	DESCRIPTION	Q	Nº	REF.	DESCRIPTION	Q
1	102.600.01	BOX	1	**17**	CEA.026	ON/OFF SWITCH	1
2	102.600.02	COVER	1	**18**	CEA.027	CONNECTOR	1
3	CEA.041	FRECUENCY INVERTER	1	**19**	CEA.030	NUT	1
4	100.610.00	PRESSURE REGULATOR	1	**20**	100.660.00	MOTOR CABLE	1
5	100.640.00	INVERTER OUTLET CABLE	1	**21**	100.411.00	PRESSURE TRANSMITTER C.	1
6	100.620.00	INVERTER ON/OFF SWITCH CABLE	1	**22**	CEA.037	CONTROL CAR	1
7	100.630.00	WIRE	1	**23**	F.900.20	CONNECTOR	3
8	CTB.005	SCREW	1	**24**	100.600.03	BOX	1
9	CAR.254	WASHER	2	**25**	CAR.022	WASHER	4
11	CTJ.005	SCREW	2	**26**	100.650.00	CONTROL CAR INVERTER C.	1
12	CTU.015	NUT	2	**27**	CTU.105	NUT	5
15	CEA.034	CONNECTOR	2	**28**	CTB.013	SCREW	4

WIRING DIAGRAM



SAFETY WARNINGS

FIRE OR EXPLOSION HAZARD

Static electricity is created by the flow of fluid through the pump and hose. If every part of the spray equipment is not properly grounded, sparking may occur and the system may become hazardous. Sparking may also occur when plugging in or unplugging a power supply cord. Sparks can ignite fumes from solvents and the fluid being sprayed, dust particles, whether you are spraying indoors or outdoors, and can cause a fire or explosion.

If you experience any static sparking or even a slight shock while using the equipment, stop spraying immediately. Check the system for proper grounding. Do not use the system again until the problem has been identified and corrected.

PRESSURE RELIEF PROCEDURE

To reduce the risk of serious bodily injury, including fluid injection, splashing fluid or solvent in the eyes or on the skin, or injury from moving parts or electric shock, allways follow this procedure whenever you shut off the sprayer, when checking or servicing any part of the spray system, when installing, cleaning or changing spray tips, and whenever you stop spraying:

· Engage the gun safety latch

· Turn the ON/OFF switch to OFF (red)

· Unplug the power supply cord (No. 14)

· Disengage the gun safety latch. Hold a metal part of the gun to the side of a grounded metal pail, and trigger the gun to relieve pressure.

· Engage the gun safety latch

· Open the pressure drain valve (No. 3), having a container ready to catch the drainage

OPERATION

1.- Connect hose and gun (use two wrenches to tighten the fittings). Don´t install the spray tip yet.

2.- Check the electrical service. Be sure the electrical installation is properly rated for the sprayer and that the outlet you use is properly grounded. Use an extension cord which has 3 wires of a minimum 4 mm size, and a maximum of 45 m long. Longer lengths may affect sprayer performance.

3.- Prepare the paint. Stir the paint to mix pigments. Strain the paint to remove particles that could clog the filters or spray tip.

4.- Put the suction tube into the pail container.

5.- Lower the pressure setting by turning the pressure adjusting knob all the way counterclockwise

6.- Disengage the gun safety latch.

7.- To prime the pump, hold a metal part of the gun firmly into a metal waste container. Squeeze the trigger and hold it open, turn the ON/OFF switch to ON, and slowly increase the pressure setting until the sprayer starts. Keep the gun triggered until all air is forced out of the system and the paint flows freely from the gun. Release the trigger and engage the gun safety latch.

Note: If the pump is hard to prime, place a container under the pressure drain valve and open it. When fluid comes from the valve, close it. Then disengage the gun safety latch and proceed as in point 7.

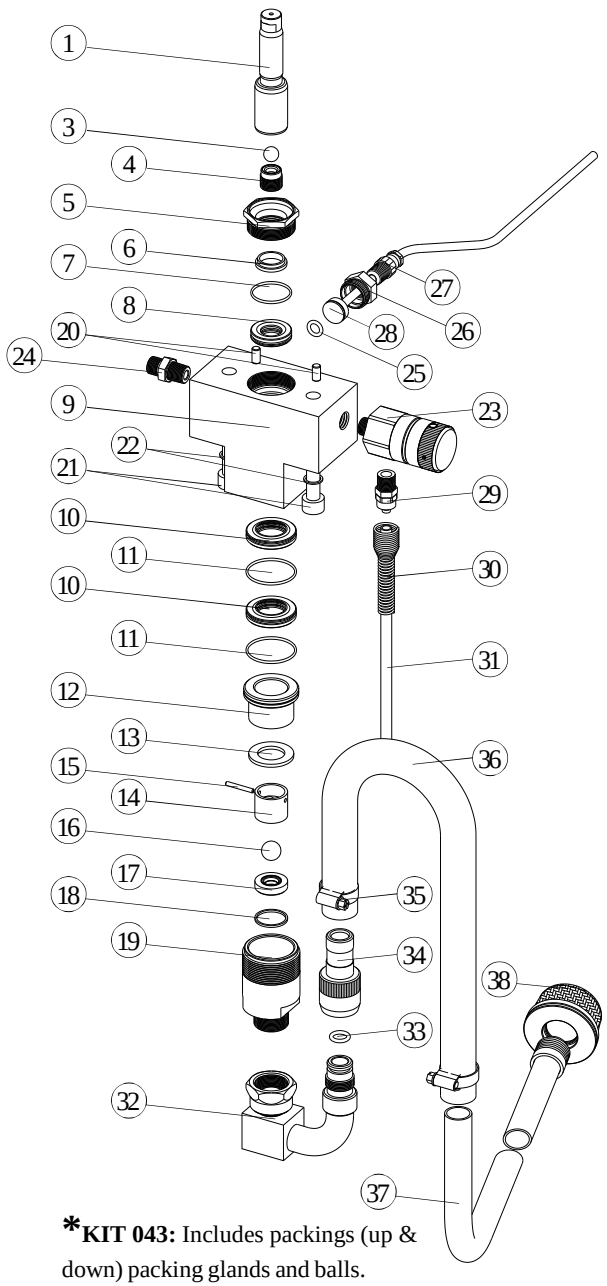
8.- Check all fluid connections for leaks. If any are found, follow the pressure relief, before tightening connections.

9.- Install the spray tip and tip guard. Be sure the gun safety latch is engaged.

Note: your new sprayer was factory tested in lightweight oil which was left in to protect pump parts. before using water-base paint, flush with mineral spirits followed by clean water. Before using oil-case paint, flush with mineral spirits only.

10.- Fill the packing nut with MBP - Packoil

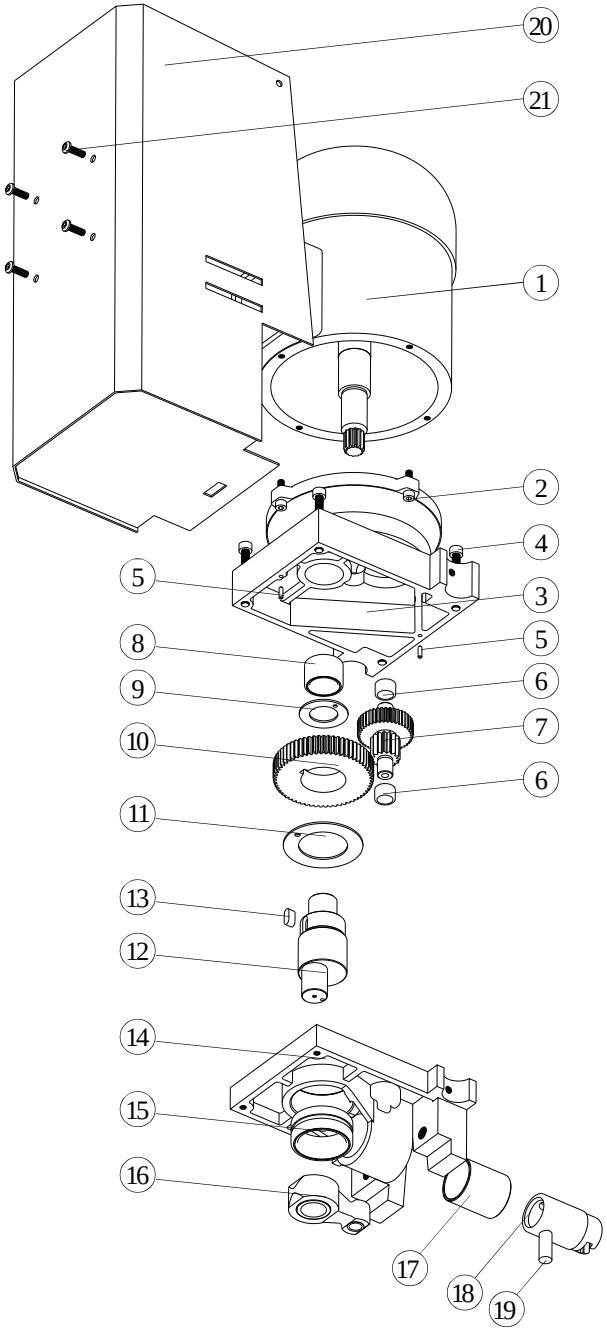
PART LIST DISPLACEMENT PUMP



***KIT 043:** Includes packings (up & down) packing glands and balls.

Nº	REF.	DESCRIPTION	Q
1	102.210.00	Rod	1
***3**	CB0.110	Ball	1
4	080.230.00	Seat ball	1
5	102.200.03	Tapón	1
6	102.200.04	Sleeve	1
***7**	CJT.044	O-ring	1
***8**	102.200.05	Packings	1
9	102.200.01	Body	1
***10**	102.200.06	Packings	2
***11**	CJT.045	O-ring	2
12	102.200.07	Sleeve	1
13	102.200.08	Joint	1
14	080.200.10	Sleeve-guide	1
15	080.200.11	Pin	1
***16**	CB0.111	Ball	1
17	102.220.00	Seat	1
18	102.200.09	Joint	1
19	102.200.02	Valve housing	1
20	CPA.218	Pin	2
21	CTB.036	Screw	2
22	CAR053	Washer	2
23	100.420.00	Valve	1
24	G.100.06	Nipple	1
25	CJT.164	Joint	1
26	100.410.01	Body	1
27	CEA.027	Packing nut	1
28	100.411.00	Sensor	1
29	CNA.057	Nipple	1
30	G.920.03	Spring	1
31	MAPM.203	Tube	1
32	102.310.00	Suction	1
33	CJT.175	Joint	1
34	102.300.01	Nipple	1
35	CC0001	Clamp	2
36	MAPM.202	Hose	1
37	102.320.00	Tube	1
38	D.910.00	Strainer	1

PARTS LIST



Nº	REF.	DESCRIPTION	Q
1	102.110.00	Motor	1
2	CTB.003	Screw	4
3	102.111.01	Housing	1
4	CTB.014	Screw	4
5	CPA.204	Pin	2
6	CB1010	Sleeve	2
7	A1.920.02	Gear	1
8	CB1012	Bearing	1
9	CB2007	Washer	1
10	A1.920.03	Gear	1
11	CB2008	Washer	1
12	A1.910.02	Rod	1
13	CPA.501	Cotter pin	1
14	102.111.02	Body	1
15	CB1009	Bearing	1
16	102.121.00	Rod	1
17	CB2002	Sleeve	1
18	102.120.02	Rod	1
19	A1.930.03	Pin	1
20	102.100.01	Cover	1
21	CTB.204	Screw	4

CLEANING

1.- Follow the Pressure Relief Procedure.

2.- If the sprayer has been used before, remove the filter bowl and screen. Clean the screen separately and install the bowl without the screen to flush it.

3.- Close the pressure drain valve

4.- For 2 liters of compatible solvent into a grounded metal pail. Put the suction tube in the pail.

5.- Remove the spray tip from the gun

6.- Lower the pressure setting by turning the pressure adjusting knob all the way counterclockwise.

7.- Hold a metal part of the gun against a metal container. Squeeze the trigger and hold it open, turn the ON/OFF switch to ON, and slowly increase the pressure setting until the sprayer starts. Keep the gun triggered until all air is forced out of the system and the solvent flows freely from the gun. Release the trigger and engage the gun safety latch.

8.- Remove the suction tube from the pail. Disengage the gun safety latch and trigger the gun to force solvent from the hose. Do not let the pump run dry for more than 15 seconds to avoid damaging the pump packings. Then follow the Pressure Relief Procedure.

9.- Leave the pressure drain valve open until you are ready to use the sprayer again. If the screen was removed, unscrew the filter bowl and reinstal the clean screen. Reinstall the bowl, hand tight.

10.- If you flushed with mineral spirits and are going to use water-base paint, flush with clean water.

TROUBLESHOOTING CHART

TROUBLE	CAUSE	SOLUTION
Unit will not prime	Dried out piston packings. Stuck valve balls.	Remove siphon tube and feel lower ball check to be sure it is free to move off it is seat. Place full cup of paint thinner over end of fluid section and turn on pump.
	Pump inlet screen plugged. Air in pump or hose	Remove and clean. Hold gun trigger in open position and run unit about 10 seconds until air is purged. Check for siphon tube leak.
	Packings worn. Fluid too viscous.	Replace. Prime pump with compatible solvent. Bring up to pressure, carefully remove pump from solvent container and immerse inlet tube into heavy material to be sprayed. With nozzle tip removed trigger gun until heavy material appears at gun. Replace nozzle tip and you are ready to spray.
	Siphon tube clogged. Siphon tube air leak. Clogged tip.	Remove and clean. Check connection and seal. Relieve pressure, remove tip and clean.
Unit will not build or maintain pressure.	Pressure adjusting knob not properly set. Pump inlet strainer dirty. Valve balls or seats worn or dirty. Air in pump or hose.	Adjust to increase pressure. Clean or temporaly remove. Replace or clean. Hold gun trigger in open position and run about 10 seconds until airs is purged.
	Packings worn. Worn spray tip. Internal leakage.	Replace. Replace. With gun trigger closed, allow unit to pump up to pressure and shut off if pump momentarily starts, internal leak is indicated and fluid section rebuild is necesary.

TROUBLE	CAUSE	SOLUTION
Unit will not build or maintain pressure.	Fuid leak.	Check for external leaks including hydraulic fittings attached to pressure control housing.
	Fluid too viscous.	Consult manufacturers recommendations on paint container label.
	Too large a spray tip.	Change tip.
Fuid leakage out relief hole at pressure control.	Worn packing.	Repack or replace transducer.
Fluid leakage at upper end of fluid section.	Upper packings worn. Piston rod worn.	Relieve pressure and tighten packing take up nut or replace packings. Replace.
Bad spray pattern.	Too large a tip size. Pressure adjustment wrong. Insufficient fluid delivery. Fuid too viscous.	Change to a smaller tip size. Adjust pressure control knob. Clean all straines and filters in system. Add solvent to fluid according to manufacturer's recommendations.
Unit lacks power.	Pressure adjustment low. Improper voltage supply.	Increase. Reconnect input voltage accordingly.
Blown fuses at pump.	Excessive pressure. Excesive extention cord length or improper wire gauge.	Have Service Center recalibrate the pressure control. Use 3x1,5 mm. section wire or larger up to maximum of 50 meters. For additional lenght, more airless hose may be used.